



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,941	12/30/2003	Michael Shoen Davis	131713-1	1911
23413 7590 01/26/2007 CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			EXAMINER CHEN, VIVIAN	
			ART UNIT	PAPER NUMBER
			1773	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/26/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/748,941

Applicant(s)

DAVIS ET AL.

Examiner

Vivian Chen

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6, 8-12, 14-18, 23, 27, 29, 31, 39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6, 8-12, 14-18, 23, 27, 29, 31 and 39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1773

## **DETAILED ACTION**

1. Claims 1-5, 7, 13, 19-22, 24-26, 28, 30, 32-38, 40-46 have been cancelled by Applicant.

### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/16/2006 has been entered.

### ***Claim Rejections - 35 USC § 112***

3. The rejections under 35 USC 112, second paragraph, in the previous Office Action have been withdrawn in view of Applicant's Amendments filed 10/16/2006.

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Art Unit: 1773

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 6, 8-12, 14-18, 23, 27, 29, 31, 39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

(a) claims 1-37 of copending Application No. 10/895,522 (US 2006/0017193);

in view of GAGGAR ET AL (US 6,720,386) or Applicant's Admissions.

The copending reference claim multilayer laminates comprising a resorcinol arylate polyester-carbonate copolymer surface layer, at least one intermediate layer, and an inner layer comprising a blend of polycarbonate and acrylonitrile-styrene-acrylate graft copolymer (ASA), and other recited features. Features not specifically recited are obvious and/or well known in the art.

GAGGAR ET AL discloses that commercially available ASA products typically comprise a grafted elastomeric terpolymer comprising acrylate-styrene-acrylonitrile (ASA) dispersed in a matrix of styrene-acrylonitrile (SAN) copolymer. (lines 13-28, col. 1)

Applicant admits that ASA products typically comprise a grafted elastomeric terpolymer comprising acrylate-styrene-acrylonitrile (ASA) dispersed in a matrix of styrene-acrylonitrile (SAN) copolymer. (specification, paragraph [0113])

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize commercially available ASA products comprising a blend of grafted ASA terpolymer and SAN copolymer as the ASA component in the laminates claimed in the copending application in order to obtain durable, attractive laminates. It would have been obvious to use commercially available stabilizers (claims 11-12) in order to improve the

Art Unit: 1773

durability and environmental resistance of the underlying PC/ASA layer. One of ordinary skill in the art would have selected the melt flow properties of the inner layer (claim 14) in order to optimize compatibility in melt processing and multilayer film forming operations.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 11-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

(a) claims 1-37 of copending Application No. 10/895,522 (US 2006/0017193);

in view of GAGGAR ET AL (US 6,720,386) or Applicant's Admissions,

as applied to claim 1 above;

and further in view of HASHIMOTO ET AL (US 6,780,917).

HASHIMOTO ET AL discloses that it is well known in the art to incorporate alkylthioester-based stabilizers as recited in claim 12 in polycarbonate resins in order to improve durability and use-life. (line 51, col. 23 to line 10, col. 24).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize commercially available stabilizers known to be suitable for use in polycarbonate-based compositions in order to improve the durability and environmental resistance of a PC/ASA blend layer.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1773

4. Claim 31 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

(a) claims 1-37 of copending Application No. 10/895,522 (US 2006/0017193);

in view of GAGGAR ET AL (US 6,720,386) or Applicant's Admissions,

as applied to claim 1 above;

and further in view of BURKE (US 5,080,950).

BURKE discloses that it is well known in the art to form structural articles from polyurethane foam, wherein the foam is covered by a protective layer. (Abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize conventional polyurethane foam materials as the substrate for the films claimed in the copending Application in order to form a durable, lightweight article.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Claim Rejections - 35 USC § 103***

5. Claims 6, 8-12, 14-18, 23, 27, 29, 31, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over:

BRUNELLE ET AL (US 6,306,507) or BRUNELLE ET AL (US 6,265,522) or WO 00/61664;

in view of GAGGAR ET AL (US 6,720,386) or Applicant's Admissions.

BRUNELLE ET AL references and WO '664 each disclose multilayer laminates comprising a resorcinol arylate polyester-carbonate copolymer surface layer having a typical

Art Unit: 1773

thickness of 2-2500 microns, at least one intermediate layer (e.g., polycarbonate, polymethylmethacrylate (PMMA), and blends thereof), and an inner layer comprising a polycarbonate, acrylonitrile-styrene-acrylate graft copolymer (ASA), polymethyl methacrylate (PMMA), and blends thereof (e.g., PC/ASA blends), wherein the laminate is optionally further applied to a thermoplastic or thermoset substrate layer. The laminate is formed by a variety of conventional methods such as coextrusion, and is suitable for automotive components and panels, as well as for forming coated foamed articles. (see entire documents)

GAGGAR ET AL discloses that commercially available ASA products typically comprise a grafted elastomeric terpolymer comprising acrylate-styrene-acrylonitrile (ASA) dispersed in a matrix of styrene-acrylonitrile (SAN) copolymer. (lines 13-28, col. 1)

Applicant admits that ASA products typically comprise a grafted elastomeric terpolymer comprising acrylate-styrene-acrylonitrile (ASA) dispersed in a matrix of styrene-acrylonitrile (SAN) copolymer. (specification, paragraph [0113])

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize commercially available ASA products comprising a blend of grafted ASA terpolymer and SAN copolymer as the ASA component in the PC/ASA blends usable as layers in the laminates disclosed in BRUNELLE references in order to obtain durable, attractive laminates which can further be used as cladding or surface layers for other substrate materials. It would have been obvious to use commercially available stabilizers (claims 11-12) in order to improve the durability and environmental resistance of the underlying PC/ASA layer. One of ordinary skill in the art would have selected the melt flow properties of the inner layer (claim 14) in order to optimize compatibility in melt processing and multilayer film forming

Art Unit: 1773

operations. It would have been obvious to incorporate additional intermediate functional layers (claim 18) in order to enhance adhesion and/or to obtain specific color or visual effects. One of ordinary skill in the art would have used conventional foam-forming materials such as polyurethane (claim 31) as a substrate in order to obtain useful coated foam articles.

Regarding claim 27, the method of forming is a product-by-process limitation and is not further limiting in as so far as the structure of the product is concerned. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. ***The patentability of a product does not depend on its method of production.*** If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." [emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113. Once a product appearing substantially identical is found, the burden shifts to applicant to show a ***unobvious*** difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1993).

6. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over:

BRUNELLE ET AL (US 6,306,507) or BRUNELLE ET AL (US 6,265,522) or WO 00/61664;

in view of GAGGAR ET AL (US 6,720,386) or Applicant's Admissions;

as applied to claim 1 above;

and further in view of HASHIMOTO ET AL (US 6,780,917).



Art Unit: 1773

HASHIMOTO ET AL discloses that it is well known in the art to incorporate alkylthioester-based stabilizers as recited in claim 12 in polycarbonate resins in order to improve durability and use-life. (line 51, col. 23 to line 10, col. 24).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize commercially available stabilizers known to be suitable for use in polycarbonate-based compositions in order to improve the durability and environmental resistance of a PC/ASA blend layer.

7. Claims 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over:

BRUNELLE ET AL (US 6,306,507) or BRUNELLE ET AL (US 6,265,522) or WO 00/61664;

in view of GAGGAR ET AL (US 6,720,386) or Applicant's Admissions;

as applied to claim 1 above;

and further in view of BURKE (US 5,080,950).

BURKE discloses that it is well known in the art to form structural articles from polyurethane foam, wherein the foam is covered by a protective layer. (Abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize conventional polyurethane foam materials as the substrate for the films disclosed in the BRUNELLE ET AL and WO '664 references in order to form a durable, lightweight article.

***Response to Arguments***

1. Applicant's arguments filed 10/16/2006 have been fully considered but they are not persuasive.

(A) Applicant's arguments directed to IDEL ET AL have been considered but are moot in view of the new ground(s) of rejection.

(B) Applicant's arguments directed to claims 11-12 have been considered but are moot in view of the new ground(s) of rejection.

(C) Applicant's arguments directed to claim 31 have been considered but are moot in view of the new ground(s) of rejection. Furthermore, with respect to the polyurethane foam substrates, the BRUNELLE ET AL references and WO '664 clearly disclose further applying the disclosed laminate to a foam layer to form a coated foam article and polyurethane is a well known, economical, and commonly used foam material.

(C) Applicant argues that there is no motivation for selecting the recited melt flow index. With respect to the melt flow index, this is an operational parameter which may be readily ascertained by one of ordinary skill in the art utilizing routine experimentation depending on various known considerations, such as the optimum molecular weight of the various polymers for a specific end-use; the type of forming method and equipment used, the desired mechanical properties of the resultant product, etc. Applicant has not provide any probative evidence of criticality or unexpected results from the recited melt flow values.

(E) Applicant argues that the prior art fails to disclose the subject matter of claim 27. However, regarding claim 27, the method of forming is a product-by-process limitation and is not further limiting in as so far as the structure of the product is concerned. "[E]ven though

Art Unit: 1773

product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. ***The patentability of a product does not depend on its method of production.*** If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." [emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113. Once a product appearing substantially identical is found, the burden shifts to applicant to show a ***unobvious*** difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1993). Applicant has not provide any probative evidence that an article formed by the recited process step is materially different from articles shaped by other methods (e.g., thermoforming, etc.)

(F) Applicant argues that the outstanding obviousness-type double patenting rejections should be withdrawn since none of the cited copending Applications nor the present Application has been patented. However, as noted above, the double patenting rejections are clearly stated as being **provisional**. Such provisional double patenting rejections are **clearly** permissible even when none of the involved Applications have yet been patented. **See MPEP 804(I)(B).**

Art Unit: 1773

*Conclusion*

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 19, 2007



Vivian Chen  
Primary Examiner  
Art Unit 1773